## APPENDIX 5-N SHOWER HOUSE WASTE DISPOSAL SYSTEM

## SHOWER HOUSE WASTE DISPOSAL SYSTEM

The shower house facilities are designed for a capacity of 120 persons. It is estimated that the flow rate will be approximately 25 gallons per day per person (Uniform Plumbing Code, Appendix 1). This gives the total flow rate of 3,000 gpd.

The waste disposal system will consist of a sewage line, which will drain into a septic tank, and a disposal field for the wastewater. The size of the septic tank shall be at least 3,375 gallons in capacity as required in R317-5-2.2 (R317-5, Utah Administrative Code).

The disposal field will consist of three absorption trenches. The dimension of the trenches will be 3 ft wide by 100 ft long by approx 11 ft deep. Each trench will be constructed in the following manner: 6 ft min of large rock for disposal area (3"-12" md), 8 inches min of ½"-2 1/2 " md gravel contained the disposal field inlet pipe, a straw barrier above the gravel and minimum of 3 ft fill above the disposal field. This will allow a minimum area of 4,600 sq ft for percolation. This area provides an adsorption capacity of 10,120 gallons per day, with a safety factor of 1.84, nearly twice the required capacity. An estimated percolation rate of 2.2 gal per sq ft was used in calculations (R317-5-3.2 (A)). Upon excavation, actual percolation tests will be performed.

The disposal field will be located a minimum of 100 ft form Bear Creek, as shown on Plates 5-2B and 7-1B. Due to the restricted amount of area, the disposal field will be located beneath the parking area. Adequate fill will be placed above the disposal field to prevent any impact on the parking area (settling, etc).

Prior to construction, necessary permits will be obtained form the Utah Pollution Control Committee. The wastewater disposal system will be constructed in accordance with all applicable state federal regulations.